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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,677	07/13/2001	Gordon Nelson	265/115 P01-0039	7136

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EXAMINER

BRAHAN, THOMAS J

ART UNIT	PAPER NUMBER
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3652

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/905,677

Applicant(s)

NELSON ET AL.

Examiner

Thomas J. Brahan

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NW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7, 8, 11-18, 20, 21 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8, 11-18, 20, 21 and 23-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

3. Claims 1, 4, 5 and 24 are rejected under 35 U.S.C. § 102(b) as being anticipated by Owczarz et al. Owczarz et al shows a processor comprising;

a process chamber (21);

a door system for opening and closing the process chamber, with the door system comprising:

a mounting plate having an annular center section (31) having a height H and first and second legs (46) joined on opposite sides of a center section having a height H, with at least one of the first and second legs having a height less than H;

an annual actuator (32/34) on the mounting plate, with the actuator having a diameter substantially equal to the diameter of the center section (31); and

a seal plate (70) attached to the actuator and moveable by the actuator to engage the process chamber to close the process chamber, and with the seal plate moveable by the actuator away from the process chamber, to open the process chamber.

Owczarz et al has the lift actuators that are pneumatic cylinders with magnetic followers (55) as recited in claims 4 and 5. The legs (146) extend rearwardly from the center section (31) at an angle (90 degrees), as recited in claim 24.

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4. Claims 1, 4, 5, 7, 8, 24 and 25 are rejected under 35 U.S.C. § 102(b) as being anticipated by Durado.

Durado discloses a processor comprising;

a process chamber (see column 2, lines 32-34);

a door system for opening and closing the process chamber, with the door system comprising:

a mounting plate having an annular center section (35) having a height H and first and second legs (52) joined on opposite sides of a center section having a height H, with at least one of the first and second legs having a height less than H;

an annual actuator (32/34) on the mounting plate, with the actuator having a diameter substantially equal to the diameter of the center section (35); and

a seal plate (70) attached to the actuator and moveable by the actuator to engage the process chamber to close the process chamber, and with the seal plate moveable by the actuator away from the process chamber, to open the process chamber.

Durado has lift actuators that are pneumatic cylinders with magnetic followers (55) as recited in claims 4 and 5. The height of the legs (52) are less than 60% and 80% of the height of the center section (35), as recited in claims 7 and 8. The legs (52) extend rearwardly from the center section (35) at an angle (90 degrees), as recited in claim 24. Durado has adjustment means (39) for adjusting the alignment of the entire door, which would adjust the alignment of the seal plate, as recited in claim 25.

5. Claim 21 is rejected under 35 U.S.C. § 102(b) as being anticipated by Thompson et al 5,544,421. Thompson et al 5,544,421 uses the door of Durado (see column 9, lines 32-40) with a robot moving between an interface section and a processing station.

6. Claims 2, 11-15, 17 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Owczarz et al in view of Thompson et al 5,431,421. Owczarz et al shows the basic claimed processing chamber door as detailed above, but varies from the claims by not having a removable cover. Thompson et al 5,431,421 shows a similar processing chamber door with a removable cover (560). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the door assembly of Owczarz et al by making it with a removable cover, for easy access to the interior of the door for maintenance, as taught by Thompson et al 5,421,421. Owczarz et al has lift actuators that are pneumatic cylinders with magnetic followers (55) as recited in claims 14 and 15.

7. Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Owczarz et al in view of Madocks et al. Owczarz et al shows the basic claimed processing system, as detailed above, but varies from the claims by not having sensors on the mounting plate legs. Madocks et al shows a similar door seal with sensors (100 and 102) mounted on mounting plate legs (brackets 103 and 105). It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to modify the door of Owczarz et al by providing their legs with sensors, to monitor their sealing, as taught by Madocks et al.

8. Claim 16 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Owczarz et al in view of Thompson et al 5,431,421, as applied above to claim 11, and further in view of Madocks et al. Owczarz et al, as modified, shows the basic claimed processing system, but varies from the claims by not having sensors on the mounting plate legs. Madocks et al shows a similar door seal with sensors (100 and 102) mounted on mounting plate legs (brackets 103 and 105). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the door of Owczarz et al by providing their legs with sensors, to monitor their sealing, as taught by Madocks et al.

9. Claim 20 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Owczarz et al in view of Thompson et al 5,431,421, as applied above to claims 2 and 11, and further in view of Yates or Durado. Owczarz et al, as modified, shows the basic claimed processing system, but varies from the claims by not having alignment means for the closure plate. Yates shows a similar door seal (21) with alignment means (screws 78, 82, 92). Durado shows a similar door with adjusting means (39). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the door of Owczarz et al by providing it with alignment means, for a better seal, as taught by Yates, or as taught by Durado.

10. Claims 21-23 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Owczarz et al in view of Thompson et al 5,431,421, as applied above to claim 11, and further in view of Thompson 5,544,421. Owczarz et al, as modified, shows the basic claimed processing system, as detailed above, but varies from the claims by not showing a robot loading the chamber. Thompson et al 5,544,421 shows a similar process chamber with a rotor and a robot. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant use the load the processing chamber and door arrangement of Owczarz et al in a processing system with a robot, to automate the processing, as taught by Thompson et al 5,544,421.

11. Claim 25 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Owczarz et al or Durado in view of Yates or Durado. Owczarz et al shows the basic claimed processing system, as detailed above, but varies from the claims by not having alignment means for the closure plate. Yates shows a similar door seal (21) with alignment means (screws 78, 82, 92). Durado shows a similar door with adjusting means (39). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the door of Owczarz et al by providing it with alignment means, for a better seal, as taught by Yates, or as taught by Durado.

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12. Claims 26, 28 and 29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Owczarz et al in view of Thompson et al 5,431,421 and Thompson 5,544,421, as applied above to claim 23, and further in view of Yates or Durado. Owczarz et al, as modified, shows the basic claimed processing system, but varies from the claims by not having alignment means for the closure plate. Yates shows a similar door seal (21) with alignment means (78, 82, 92). Durado shows a similar door with adjusting means (39). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the door of Owczarz et al by providing it with alignment means, for a better seal, as taught by Yates, or as taught by Durado.

13. Claim 27 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Owczarz et al in view of Thompson et al 5,431,421, Thompson 5,544,421 and Yates or Durado, as applied above to claim 26, and further in view of Madocks et al. Owczarz et al, as modified, shows the basic claimed processing system, but varies from the claims by not having sensors on the mounting plate legs. Madocks et al shows a similar door seal with sensors (100 and 102) mounted on mounting plate legs (brackets 103 and 105). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the door of Owczarz et al by providing their legs with sensors, to monitor their sealing, as taught by Madocks et al.


14. Applicant argues in the amendment filed November 1, 2004, that Owczarz et al does not have a mounting plate with an annular center section, as the main support 30 is not round or annular. However the claim does not require that the entire support is annular, just a center section. Owczarz et al has such a section 31. This section has a diameter about equal to the annular actuator 32 and just slightly greater the legs (side panels 46). Durado shows a similar door arrangement with a square door, an annular support, and side legs. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. An inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Brahan whose telephone number is (703) 308-2568. The examiner's supervisor, Ms. Eileen Lillis, can be reached at (703) 308-3248. The fax number for all patent applications is (703) 872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions regarding access to the Private PAIR system, should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 12/26/04
Thomas J. Brahan
Primary Examiner
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